

REMARKS/ARGUMENTS

Claims 20, 21, and 24-34 are pending. Claims 24 and 30 have been amended. New claims 31-34 have been added. No new matter has been added to the amended or new claims.

Claims 24 and 30 are rejected under 35 U.S.C. § 102 as being anticipated by Baynham (US 6,198,922).

As amended, all the pending claims of the subject application comply with all requirements of 35 U.S.C. Accordingly, the Applicants request examination and allowance of all pending claims.

Allowable Subject Matter

Claims 20, 21, and 25-29 are allowed over the prior art. The Applicants respectfully thank the Examiner for the indication of allowable subject matter.

Claim Rejections - 35 U.S.C. § 102

Claim 24 recites "establishing a hierarchical quadtree data structure for representing an area of interest including the geographical zone" and "wherein information regarding said subset of subcells is replaced with information regarding said particular cell of said first level of said hierarchical quadtree data structure, thereby facilitating storage and processing of said geographical zone definition." The Applicants respectfully submit that the cited reference does not teach or suggest at least these claim elements.

As discussed in the preliminary amendment filed with the Request for Continued Examiner (RCE) on October 31, 2005, embodiments of the present invention provide methods and systems for condensing a hierarchical quadtree data structure. The claimed invention recited in claim 24 utilizes a quadtree condensation process that facilitates the storage and processing of the geographical zone definition. The method includes "establishing a hierarchical quadtree data structure" and replacing "information regarding said subset of subcells" "with information regarding said particular cell of said first level of said hierarchical data structure."

The cited reference does not teach or suggest a quadtree data structure as recited by claim 24. Moreover, the cited reference appears to use a subdivision only approach and does not teach or suggest the condensation process recited by claim 24. For at least these reasons, claim 24 is in condition for allowance.

Claim 30 recites "establishing a hierarchical quadtree data structure for representing an area of interest including the geographical zone." The quadtree data structure includes a first level where the area of interest is represented by cells and a second level where the area of interest is represented by subcells. The subcells of the second level correspond to smaller geographical areas than the cells of the first level.

Claim 30 also recites "determining that all the subcells of the second level that correspond to a given cell of the first level have indicators, and condensing the hierarchical quadtree data structure by establishing an indicator for the given cell and removing the subcells from the hierarchical quadtree data structure." As discussed in relation to claim 24, the cited reference does not teach or suggest this condensation process. On the contrary, the cited reference merely performs subdivision of cells to correlate geographic regions with the geometry used by the network (see figures 7 and 8 of Baynham). Step 730 ("Divide Cell") in figure 7 of Baynham is a step in which cells are divided to increase the resolution of the correlation. However there is no discussion in the cited reference of condensing these subdivided cells as recited by claim 30. For at least these reasons, claim 30 is in condition for allowance.

Claims 31-34, which depend from claim 30, are in condition for allowance, for at least the reasons discussed in relation to claim 30, as well as for the additional elements they recite.

Appl. No. 09/788,036
Amdt. dated March 28, 2006
Reply to Office Action of January 6, 2006


PATENT

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,


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